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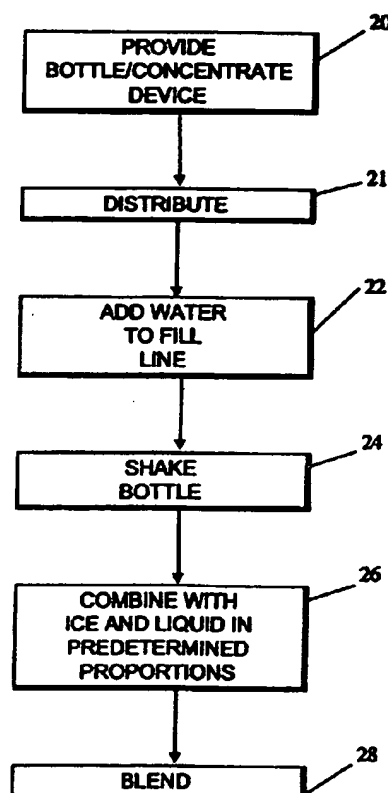
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(54) **METHODE ET DISPOSITIF DE FABRICATION DE BOISSONS  
GLACEES AROMATISEES ET DE GRANITAS**

(54) **METHOD AND DEVICE FOR MAKING FLAVORED ICED  
DRINKS AND GRANITAS**



(57) A method for making smoothies and granitas includes the utilization of a bottle having a replaceably removable sealing cap, a fill indicium thereon spaced from the top of the bottle, a flavor concentrate in the bottle of a quantity and concentration predetermined for producing a mixture of another predetermined flavor concentration when combined with a liquid introduced into the bottle to the fill indicium. Such bottles with contained flavor concentrate are distributed to users who introduce a liquid into the bottle for combining with the flavor concentrate until the fill indicium is reached, and shaking the closed bottle until the concentrate is mixed with the liquid to produce a mixture of such other predetermined concentration. The mixture may be added to a blender, along with ice and perhaps further liquid, in predetermined proportions, in a blender for producing a smoothie or slush; or the mixture may be added to a granita machine for making a granita.



**ABSTRACT OF THE DISCLOSURE**

A method for making smoothies and granitas includes the utilization of a bottle having a replaceably removable sealing cap, a fill indicium thereon spaced from the top of the bottle, a flavor concentrate in the bottle of a quantity and concentration predetermined for producing a mixture of another predetermined flavor concentration when combined with a liquid introduced into the bottle to the fill indicium. Such bottles with contained flavor concentrate are distributed to users who introduce a liquid into the bottle for combining with the flavor concentrate until the fill indicium is reached, and shaking the closed bottle until the concentrate is mixed with the liquid to produce a mixture of such other predetermined concentration. The mixture may be added to a blender, along with ice and perhaps further liquid, in predetermined proportions, in a blender for producing a smoothie or slush; or the mixture may be added to a granita machine for making a granita.

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**METHOD AND DEVICE FOR MAKING FLAVORED**

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**ICED DRINKS AND GRANITAS**

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**FIELD OF THE INVENTION**

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This invention relates to food packaging and preparation, and more particularly to devices and methods for making flavored iced drinks and granitas.

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**BACKGROUND OF THE INVENTION**

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As used herein, the term "iced drink" is used generally to include semi-frozen or frozen drinks such as commonly known as a "slush" or a "smoothie", as well as drinks served over ice cubes or crushed ice, and in any case being either non-alcoholic or alcoholic. A granita is generally considered to be a flavored ice or coarse-grain sherbet, and as used herein the term "granita" includes such products as well as products similar thereto, and the term "granita machine" includes machines for making granitas and products similar thereto.

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Slushes and smoothies have been popular for many years, and consist of a mixture of flavor ingredients (such as fruits and sugar) and a finely divided ice/water mixture of the consistency of slush. The conventional manner of making these drinks is by combining the flavor ingredients with crushed ice (which term includes shaved ice, as used herein) in a blender, and operating the blender until a slush consistency of the mixture results. The slush or smoothie is then spooned or poured into a drinking glass.

1 When making a granita, the flavor ingredients are mixed with water or other liquid; this  
2 mixture is added to a granita machine and the granita machine is operated to produce  
3 the granita.

4 The flavor ingredients are typically provided in the form of a syrup or frozen  
5 concentrate. When making a slush or smoothie, or a granita, it is typical for a user to  
6 measure a quantity of the syrup or concentrate, measure a quantity of water or other  
7 liquid, and combine the concentrate or syrup and liquid with a measured quantity of  
8 crushed ice in a blender (in the case of a smoothie or slush), or mixing the measured  
9 concentrate or syrup and liquid and adding the mixture to a granita machine (in the case  
10 of a granita). Such measuring and mixing operations are inconveniences and represent  
11 cost and time inefficiencies in the context of a bar or other commercial establishment  
12 making and serving iced drinks and/or granitas.

### 13 SUMMARY OF THE INVENTION

14 These inconveniences and inefficiencies of the prior art are avoided by the  
15 method and device for making iced drinks and granitas in accordance with the present  
16 invention. The device of the present invention comprises a bottle having a replaceably  
17 removable sealing cap, the bottle having a "fill line", or fill mark or indicium, thereon  
18 in the vicinity of but spaced from the bottle's opening or top; and a flavor concentrate  
19 contained in the bottle in a quantity occupying only a portion of the bottle's capacity or  
20 interior volume, the quantity (measured by either volume or weight) and concentration  
21 of the flavor concentrate being predetermined for producing a mixture of another  
22 predetermined flavor concentration when combined with a liquid introduced into the

1 bottle to the fill indicium. When the device is used in accordance with the present  
2 invention, the mixture may be used for making a granita; or when the mixture is  
3 combined with ice in predetermined proportions, and perhaps additional liquids are  
4 added thereto, an iced drink may be produced. As used herein, the term "bottle"  
5 describes a container having walls that are impervious to liquid and air, and having a  
6 closeable opening through which ingredients may be introduced into the bottle and  
7 through which a liquid mixture may be poured from the bottle.

8       The method for making a flavored iced drink according to the present invention  
9 comprises: providing a bottle having a replaceably removable sealing cap, the bottle  
10 having a fill indicium thereon spaced from the top of the bottle; providing a flavor  
11 concentrate in the bottle, the quantity and concentration of the flavor concentrate being  
12 predetermined for producing a mixture of another predetermined flavor concentration  
13 when combined with a liquid introduced into the bottle to the fill indicium; distributing  
14 to a user the bottle with the cap thereon and the flavor concentrate contained therein;  
15 the user removing the cap and introducing a liquid into the bottle for combining with  
16 the flavor concentrate until the fill indicium is reached, and replacing the cap on the  
17 bottle; shaking the bottle until the concentrate is mixed with the liquid to produce a  
18 mixture of such other predetermined concentration; and removing the cap and  
19 combining a quantity of the mixture with ice, and perhaps further liquid, in  
20 predetermined proportions. For making a smoothie or slush, the ice is preferably in  
21 crushed form, and the method further includes: providing a blender, the mixture  
22 quantity and ice in predetermined proportions being combined in the blender; and

1 operating the blender to produce a smoothie or slush. For making a granita, the  
2 combining of the mixture portion with ice may be omitted, and the method further  
3 includes: providing a granita machine; pouring a quantity of the mixture into the granita  
4 machine; and operating the granita machine to produce a granita.

5 The bottle of the device may include another mark or shake indicium or line to  
6 prompt a preliminary shaking step. The bottle so marked is provided with the flavor  
7 concentrate contained therein, and after distribution to a user, the user completes the  
8 method according to the present invention by: removing the cap and introducing a  
9 liquid into the bottle for combining with the flavor concentrate until the shake indicium  
10 is reached, and replacing the cap on the bottle; shaking the bottle until the concentrate  
11 is mixed with the liquid; removing the cap and introducing additional liquid into the  
12 bottle until the fill indicium is reached, and replacing the cap on the bottle; shaking the  
13 bottle again until the mixture of the concentrate and liquids has a uniform  
14 concentration. For making a smoothie or slush, the method includes removing the cap  
15 and combining in a blender a quantity of the mixture of uniform concentration with  
16 crushed ice and perhaps further liquid in predetermined proportions; and operating the  
17 blender to produce a smoothie or slush. For making a granita, the method includes  
18 providing a granita machine; removing the cap and pouring a quantity of the mixture of  
19 uniform concentration into the granita machine; and operating the granita machine to  
20 produce a granita.

## BRIEF DESCRIPTION OF THE DRAWINGS

The novel features which are believed to be characteristic of the invention, together with further advantages thereof, will be better understood from the following description considered in connection with the accompanying drawings in which preferred embodiments are illustrated by way of example. It is to be expressly understood, however, that the drawings are for the purpose of illustration and description only and are not intended as a definition of the limits of the invention.

FIG. 1 is an elevation perspective view of a first preferred embodiment of a device according to the present invention;

FIG. 2 is a flow diagram showing the method according to the present invention, in particular as applied to the device of FIG. 1;

FIG. 3 is a side elevation perspective view of a second preferred embodiment of a device according to the present invention; and

FIG. 4 is a flow diagram showing the method according to the present invention, in particular as applied to the device of FIG. 3.

## DESCRIPTION OF THE PREFERRED EMBODIMENTS

Turning first to FIG. 1, there is shown a bottle 10, preferably of plastic and of a one-liter or one-quart size. The bottle 10 contains a flavor concentrate (preferably a water-soluble thick liquid or slurry) such as a concentrated syrup containing flavorings (for example, fruit or berry flavors) and sugar, and the bottle's top opening 14 is sealed by a cap 16 such as by threadably mating with the bottle about the bottle's top. The

1 bottle 10 is marked with a "fill" indicium, such as the fill line 18, in the vicinity of the  
2 bottle's top opening 14 but spaced therefrom.

3 The quantity and concentration of the concentrate 12 in the bottle 10 are  
4 predetermined such that, when a quantity of water is introduced into the bottle 10 such  
5 that the level of the water/concentrate mixture just reaches the fill line 18, the resulting  
6 mixture (after shaking) is at a predetermined flavor concentration for permitting its use  
7 in making a flavored iced drink or a granita, but preferably for making a flavored iced  
8 drink as described below.

9 In accordance with the method hereof, devices as in FIG. 1, comprising the  
10 combination of marked bottle 10 and flavor concentrate 12, are provided and  
11 distributed to users as noted by blocks 20 and 21 of FIG. 2. The user removes the cap  
12 16, introduces water into the bottle 10 through the bottle opening 14 until the fill line  
13 18 is reached, and replaces the cap 16 on the bottle 10 to close the bottle's opening 14  
14 (block 22). Grasping the bottle 10, he or she shakes it until the concentrate 12 is  
15 completely dissolved in or mixed with the water to form a flavored solution or mixture  
16 of another predetermined concentration (block 24). The space between the fill line 18  
17 and the top of the bottle 10 facilitates mixing when the bottle 10 is shaken.

18 When the user desires to utilize the solution or mixture, he or she removes the  
19 cap 16 and combines a portion of the mixture with ice, and perhaps a further liquid, in  
20 predetermined proportions (block 26). For example, the user may pour out  
21 approximately three fluid ounces of the mixture from the bottle 10 into a container, add  
22 say seven ounces of ice (cubes or preferably crushed), and perhaps one ounce of an



1 alcoholic liquor. The resulting drink may be consumed at this point, or additional water  
2 or other liquid may be added to individual taste. Preferably, however, the mixture  
3 resulting from block 26 is placed in a blender, and the blender is operated to produce a  
4 flavored slush or smoothie (block 28). Blenders and their operation are well known, for  
5 both household and commercial use, such as those described in U.S. Patent 3,901,484  
6 to P. Ernster, and in U.S. Patent 4,681,030 to J. Herbert (combined with an ice-  
7 shaving machine), the disclosures of both of these patents being incorporated herein by  
8 reference.

9 Turning to FIG. 3, a second preferred embodiment of a device according to the  
10 present invention comprises a bottle 30, preferably of plastic and of a one-gallon size,  
11 and preferably including a handle 32. The bottle 30 contains a flavored concentrate  
12 (preferably a water-soluble liquid or slurry), such as a concentrated syrup containing  
13 flavorings and sugar, and the bottle's top opening 36 is sealed by a cap 38 such as by  
14 threadably mating with the bottle 30 about the bottle's top. The bottle 30 is marked with  
15 a "shake" indicium, such as the shake line 40, approximately midway the height  
16 dimension of the bottle 30, and a "fill" indicium such as the fill line 42 in the vicinity  
17 of the bottle's top opening 36 but spaced therefrom.

18 The quantity and concentration of the concentrate 34 in the bottle 30 are  
19 predetermined for each flavor such that, when a quantity of water is introduced into the  
20 bottle 30 such that the level of the water/concentrate mixture just reaches the fill line  
21 42, the resulting mixture (after shaking) is at a predetermined flavor concentration for

1 permitting its use in making an iced drink or a granita, but preferably a granita as  
2 described below.

3 In accordance with the method hereof, devices as in FIG. 3, comprising the  
4 combination of marked bottle 30 and flavor concentrate 34, are provided and  
5 distributed to users as noted by blocks 44 and 45 of FIG. 4. The user removes the cap  
6 38, introduces water into the bottle 30 through the bottle opening 36 until the shake line  
7 40 is reached, and replaces the cap 38 on the bottle 30 to close the bottle's opening 36  
8 (block 46). Grasping the bottle 30, he or she shakes it until the concentrate 34 is  
9 completely dissolved in or mixed with the water (block 48). The user again removes the  
10 cap 38, introduces additional water into the bottle 30 until the fill line 42 is reached,  
11 and replaces the cap 38 (block 50). Grasping the bottle 30, he or she shakes it until the  
12 solution or mixture has a uniform concentration (block 52). The space between the fill  
13 line 42 and the top of the bottle 30 facilitates mixing when the bottle 30 is shaken. The  
14 resulting flavored solution or mixture is of a predetermined concentration suitable for  
15 making a granita.

16 When the user desires to utilize the solution or mixture for making a granita or  
17 similar product, he or she removes the cap 38, pours a quantity of the mixture into a  
18 granita machine, and operates the machine to produce a granita (block 54). Granita  
19 machines and their operation are well known, and are described in, for example, U.S.  
20 Patent 3,159,007 to C. E. Rahauser et al., and in U.S. Patent 4,900,158 to G. Ugolini,  
21 the disclosures of both of these patents being incorporated herein by reference.

1           It may be appreciated that, whenever water is to be introduced or added during  
2   the steps of FIGs. 2 and 4, another liquid (e.g. milk or tea) may be added in lieu of all  
3   or a portion of the water.

4           The formulation of flavor concentrates 12 and 34, for use in practicing the  
5   method of the present invention, and the quantities of particular concentrates to be  
6   supplied in the bottles 10 and 30 in relation to the quantities of liquid to be added by the  
7   user, are within the level of ordinary skill in the art. In addition, such concentrates are  
8   available from Capriccio, of Chatsworth, California, for example under the  
9   designations Capriccio No. 1 (Strawberry), Capriccio No. 2 (Tangerine), and Capriccio  
10   No.3 (Cappuccino Tiramisu).

11           Thus there has been described devices and methods for making iced drinks,  
12   including slushes or smoothies, and granitas. Other embodiments of the invention and  
13   variations of the embodiments presented herein may be developed without departing  
14   from the essential characteristics thereof. Accordingly, the invention should be limited  
15   only by the scope of the claims listed below.

**CLAIM:**

1        1. A method for making a flavored iced drink, comprising:

2                providing a bottle having a replaceably removable sealing cap, said bottle  
3        having a fill indicium thereon spaced from the top of said bottle;

4                providing a flavor concentrate in said bottle, the quantity and  
5        concentration of said flavor concentrate being predetermined for producing a  
6        mixture of another predetermined flavor concentration when combined with a  
7        liquid introduced into said bottle to said fill indicium;

8                distributing to a user said bottle with said cap thereon and said flavor  
9        concentrate contained therein;

10               the user removing said cap and introducing a liquid into said bottle for  
11        combining with said flavor concentrate until said fill indicium is reached, and  
12        replacing said cap on said bottle;

13               shaking said bottle until said concentrate is mixed with said liquid to  
14        produce a mixture of said other predetermined concentration; and

15               removing said cap and combining a quantity of said mixture with ice in  
16        predetermined proportions.

1       2. The method according to Claim 1, further including:

2               blending the combined mixture quantity and ice.

1       3. The method according to Claim 1, further including:

2               providing a blender;

3               said quantity of said mixture and said ice in predetermined proportions

4       are combined in said blender; and

5               operating said blender to produce a smoothie or slush.

1       4. The method according to Claim 3, wherein:

2               said liquid is water.

1       5. The method according to Claim 3, wherein:

2               said liquid is milk.

1       6. The method according to Claim 3, wherein:

2               said ice is in crushed form when combined with the mixture quantity.

1       7. The method according to Claim 6, further including:

2               combining a predetermined quantity of a further liquid to the combined

3       mixture quantity and ice before the blender operating step.

1       8. The method according to Claim 7, wherein:

2               said further liquid is selected from the group consisting of water, milk,

3       tea and alcoholic liquor.

1       **9. A method for making an iced drink or a granita, comprising:**

2               **providing a bottle having a replaceably removable sealing cap, said bottle**  
3       **having a fill indicium thereon spaced from the top of said bottle and a shake**  
4       **indicium thereon approximately midway between the bottom of said bottle and**  
5       **said fill indicium;**

6               **providing a flavor concentrate in said bottle, the quantity and**  
7       **concentration of said flavor concentrate being predetermined for producing a**  
8       **mixture of another predetermined flavor concentration when combined with a**  
9       **liquid introduced into said bottle to said fill indicium;**

10              **distributing to a user said bottle with said cap thereon and said flavor**  
11       **concentrate contained therein;**

12              **the user removing said cap and introducing a liquid into said bottle for**  
13       **combining with said flavor concentrate until said shake indicium is reached, and**  
14       **replacing said cap on said bottle;**

15              **shaking said bottle until said concentrate is mixed with said liquid; and**

16              **removing said cap and introducing additional liquid into said bottle until**  
17       **said fill indicium is reached, and replacing said cap on said bottle.**

1       10. The method according to Claim 9, further including:  
2               shaking said bottle again until the mixture of said concentrate and said  
3       liquids has a uniform concentration;  
4               providing a granita machine; and  
5               removing said cap and pouring a quantity of said mixture of uniform  
6       concentration into said granita machine; and  
7               operating said granita machine to produce a granita.

1       11. The method accordingly to Claim 10, wherein:  
2               said liquid and said additional liquid are each selected from a group  
3       consisting of water, milk and tea.

1       12. The method according to Claim 9, further including:  
2               shaking said bottle again until the mixture of said concetrare and said  
3       liquids has a uniform concentration;  
4               providing a blender;  
5               removing said cap and combining in said blender a quantity of said  
6       mixture of uniform concentration with ice in predetermined proportions; and  
7               operating said blender to produce a slush or smoothie.

1       13. The method according to Claim 12, further including:  
2               combining a predetermined quantity of a further liquid to said quantity of  
3       said mixture of uniform concentration and ice in said blender before operating  
4       said blender.

- 1       **14. The method according to Claim 13, wherein:**
- 2               **said further liquid is selected from the group consisting of water, milk,**
- 3       **tea and alcoholic liquor.**



1           15. In a method for making a flavored iced drink or granita, the steps

2   comprising:

3           providing a bottle having a replaceably removable sealing cap, said bottle

4           having a fill indicium thereon spaced from the top of said bottle, said bottle

5           containing therein a flavor concentrate in a quantity occupying only a portion of

6           said bottle's capacity corresponding to said fill indicium, the quantity and

7           concentration of said flavor concentrate being predetermined for producing a

8           mixture of another predetermined flavor concentration when combined with a

9           liquid introduced into said bottle to said fill indicium;

10          removing said cap and introducing a liquid into said bottle for combining

11          with said flavor concentrate until said fill indicium is reached, and replacing

12          said cap on said bottle; and

13          shaking said bottle until said concentrate is mixed with said liquid to

14          produce a mixture of said other predetermined concentration.

1       **16. The method according to Claim 15, further including the step of:**  
2               **removing said cap and combining a quantity of said mixture with ice in**  
3       **predetermined proportions.**

1       **17. The method according to Claim 15, further including the steps of:**  
2               **providing a blender;**  
3               **removing said cap and combining in said blender a quantity of said**  
4       **mixture with ice in predetermined proportions; and**  
5               **operating said blender to produce a smoothie or slush.**

1       **18. The method according to Claim 15, further including the steps of:**  
2               **providing a granita machine;**  
3               **removing said cap and pouring a quantity of said mixture into said**  
4       **granita machine; and**  
5               **operating said granita machine to produce a granita.**

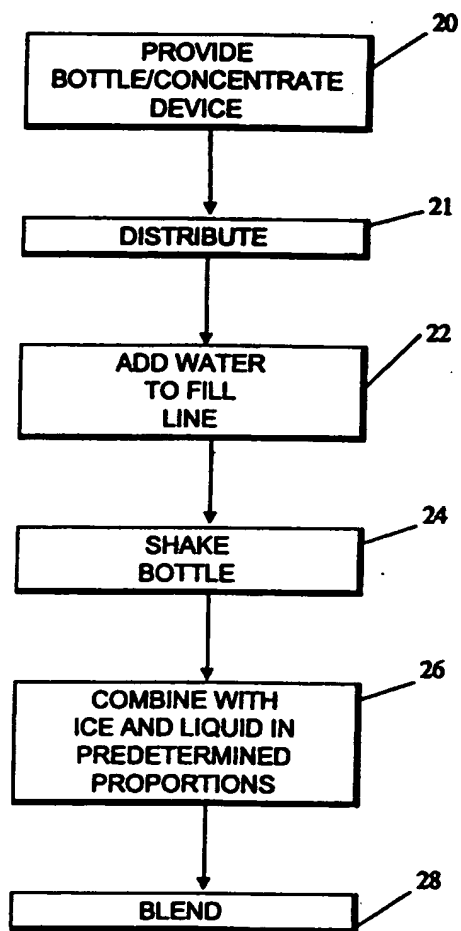
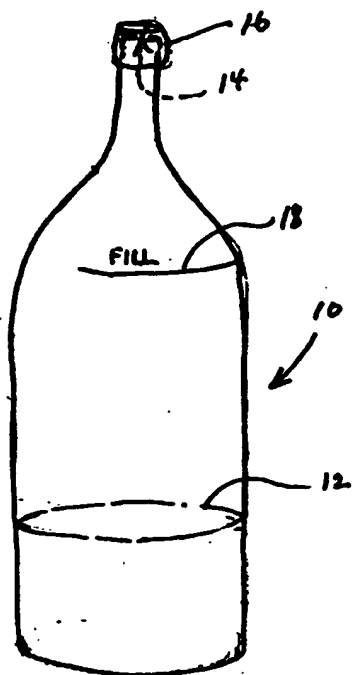
1       **19. A device for use in making flavored iced drinks and granitas, comprising:**

2               **a bottle having a replaceably removable sealing cap, said bottle having a**  
3       **fill indicium thereon spaced from the top of said bottle; and**

4               **a flavor concentrate contained in said bottle in a quantity occupying only**  
5       **a portion of said bottle's capacity, the quantity and concentration of said flavor**  
6       **concentrate being predetermined for producing a mixture of another**  
7       **predetermined flavor concentration when combined with a liquid introduced into**  
8       **said bottle to said fill indicium.**

1       **20. The device according to Claim 19, wherein:**

2               **said bottle includes a shake indicium thereon between the bottom of said**  
3       **bottle and said fill indicium for permitting mixing of said concentrate with a**  
4       **portion of said liquid introduced into said bottle to said shake indicium.**



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